

**Amendments to the Claims:**

This Listing of Claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

Claim 1 (canceled).

Claim 2 (currently amended): A method for measuring ~~[[the]]~~ thickness of a thin film, the method comprising the steps of:

irradiating white light onto a ~~the~~ surface of a sample having whereon an optically transparent thin film thereon is formed, during polishing;

detecting ~~[[the]]~~ reflected light from ~~generated by~~ said sample due to the irradiation with ~~of~~ said white light; and

determining the thickness of said optically transparent film~~[[,]]~~ by using information from ~~for~~ the spectral waveform of the reflected light thus detected;

wherein, in said step of determining the film thickness, the film thickness is determined by using information from ~~for~~ the spectral waveform of the reflected light from prescribed regions which are determined using information from at least one of the spectral waveform, reflectivity of the surface of the sample, and a frequency spectrum in the spectral waveform, on the basis of a characteristic quantity of the spectral waveform of the reflected light from ~~generated by~~ said sample.

Claim 3 (currently amended): The method for measuring the thickness of a thin film according to claim 2, wherein the characteristic quantity of the spectral waveform of said reflected light is based on ~~[[the]]~~ reflection intensity of the spectral waveform of said reflected light.

Claim 4 (currently amended): The method for measuring the thickness of a thin film according to claim 2, wherein the characteristic quantity of the spectral waveform of said reflected light is based on ~~[[the]]~~ frequency spectrum intensity of the spectral waveform of said detected reflected light.

Claim 5 (original): The method for measuring the thickness of a thin film according to claim 2, wherein the characteristic quantity of the spectral waveform of said reflected light is the similarity of the spectral waveform based on a previously measured film thickness distribution.

Claim 6 (canceled).

Claim 7 (withdrawn).

Claims 8-11 (canceled).

Claim 12 (currently amended): A method for measuring ~~[[the]]~~ thickness of a thin film~~[[,]]~~ comprising: ~~the steps of:~~

irradiating white light onto a ~~[[the]]~~ surface of a sample ~~having an~~ ~~whereon an~~ optically transparent thin film is ~~thereon~~ ~~formed~~, during polishing;

detecting ~~the reflected light~~ reflected from prescribed regions of said sample which are determined using at least one of a spectral waveform, reflectivity of the surface of the sample with respect to the white light, and a frequency spectrum of the spectral waveform, from the reflected light ~~from generated by said sample due to the irradiation of said white light~~; and

determining the thickness of said optically transparent film, by using information for a characteristic quantity of the spectral waveform of the reflected light from the prescribed regions thus detected~~[[;]]~~.

Claim 13 (currently amended): The method for measuring the thickness of a thin film according to claim 12, wherein the information for a characteristic quantity of the spectral waveform of said reflected light comprises ~~is~~ information about ~~for~~ the reflection intensity of the spectral waveform of said reflected light.

Claim 14 (currently amended): The method for measuring the thickness of a thin film according to claim 12, wherein the information for a characteristic quantity of the spectral waveform of said reflected light comprises ~~is~~ information about a ~~for~~ the frequency spectrum intensity of the spectral waveform of said detected reflected light.

Claim 15 (currently amended): The method for measuring the thickness of a thin film according to claim 12, wherein the information for a characteristic quantity of the spectral waveform of said reflected light comprises ~~is information about~~ for the similarity of the spectral waveform based on a previously measured film thickness distribution.

Claim 16 (canceled).

Claim 17-30 (withdrawn).

**Amendments to the Drawings:**

The attached sheets of drawing includes changes to Figs. 2 and 13. Corrected drawings are now being prepared and will be filed as soon as possible.

Attachment: Annotated sheets showing changes